Simulation2D

update()

Simulation3D

update()

AbstractSimulation

window: OpenGLWindow\*

shaderProgram: ShaderProgram\*

VAO, VBO, EBO: unsigned int

vertexData: float\*

vertexDataSize: unsigned int

indices: unsigned int\*

indicesSize: unsigned int

particles: AbstractParticle\*

// Particle Generator

*update()*

deallocate()

Particle3D

generateOpenGLVertices()

Particle2D

generateOpenGLVertices()

AbstractParticle

radius: float

mass: float

position: float vector (FVector)

velocity: float vector (FVector)

color: float vector (FVector)

*generateOpenGLVertices()*